

extraction, and may have been prehistorically connected, but the Chitráli calls himself Kho, and speaks "Khowar," and his language (ordinarily known as Chitráli) would not be understood in Wakhan. The Tajik (the original Persian stock) of Turkestan and the Oxus does not derive his designation from *táj*, "a crown," but from *Tazi*, a word which means "Arabic"—or "of Arab extraction," and which is more intelligible as applied by the pure bred Persian to the Tajik races of Baluchistan (where there has ever been much Arab admixture of blood) than to the people of the Oxus or of the Kabul basin. It practically means "half breed," and may be recognised again in the word *Tazi*, which Mr. Cobbold applies to the dogs which he brought with him from the highlands.

That the Hindu Kush may ultimately mark the geographical boundary between Russian and British spheres of interest in Asia, or even that Chinese Turkestan (or the New Dominion) may ultimately become as much a Russian province as Bokhara (and it certainly is a fact that Russian influence is already predominant in Kashgar), is an eventuality which many politicians have contemplated for years past. But it strikes no terror into the hearts of those who look upon a definite and final understanding with Russia as the best guarantee for peace and for the advancement of civilisation in Asia. Nor need we as yet concern ourselves with such a consummation as would be involved by the Cossacks gazing down on Kabul from their barracks "on the heights of the Kohistan."

Apart from his political views, Mr. Cobbold's book is instructive as well as interesting. He tells us much that is new about districts which are not within the reach of every traveller, and his chapter on the trade of Innermost Asia is specially worth study. T. H. H.

DR. WILLIAM MARCET, F.R.S.

ALL who are interested in medicine and the cognate sciences learnt with great regret of the death of Dr. William Marcet, which occurred on March 4, at Luxor, at the ripe age of seventy-two years. Dr. Marcet up till last summer continued to take that keen interest in matters scientific which had characterised him all his life, and it was only with a pronounced failure in his health that he discontinued active physiological research. His active scientific life in London was longer than the average, and exceeded half a century; and this, perhaps, accounts for his many friends, and also for the fact that he was brought into contact with successive generations of physiological workers. His ample means rendered time of less consequence to him than to many of his colleagues, and this good fortune was utilised by him to the full, in that his researches were for the most part directed to themes of a time-consuming nature, and also to those requiring for their adequate prosecution somewhat elaborate and expensive methods.

With the exception of his contributions to meteorology, his work was almost entirely directed to the chemical side of physiology and pathology; his additions to the literature of clinical medicine were relatively small; and although he was for some time on the staff of the Westminster and Brompton Hospitals, as a physician, he was by the present generation hardly known.

The first sphere of his chemico-physiological labours was a somewhat unæsthetic one—viz. the human feces. In 1851 he published "Some observations on the fatty matters of human excrements in disease." In 1856 his first work upon dietetics appeared, entitled "The composition of food and how it is adulterated, with practical directions for its analysis." This book was one of the earliest systematic contributions to this subject, and must have been the expression of considerable labour and research. Dr. Marcet next directed his attention to the physio-

logical and pathological properties of alcohol, and published two monographs upon the subject. His "Chronic alcoholic intoxication" includes a synoptical table of cases. In 1864 he made some observations upon a colloid acid, a normal constituent of human urine, and in the same year published a short essay upon the brine of salt meat and on the distribution of albumen through the muscular tissue. His dietetic researches extended, in 1867, to a description of a method for peptonising meat, and the employment of the formed product in diseases of the stomach.

Dr. Marcet, in this country, was one of the earliest workers with the laryngoscope, and wrote, in 1869, "Clinical notes on diseases of the larynx, investigated and treated with the assistance of the laryngoscope." In 1869 he published the results of some observations he made upon the temperature of the human body during climbing.

Dr. Marcet's two contributions to meteorology and climatology were a monograph on the weather at Cannes during the season 1875-76, which appeared in 1877, and a book of some four hundred pages on the "Principal Southern and Swiss health resorts," which was published in 1883. Although this book cannot be regarded as a systematic treatise on climatology, it is most readable, and contains a mass of useful hygienic information concerning the Riviera, Canary Islands, Madeira, Egypt, &c. Even a discussion of the cause of the green colour of Marennes oysters is to be found in it.

In spite of the somewhat extensive bibliography given above, it is nevertheless as a worker on respiration that the subject of this notice was, and will be, chiefly known. Years of researches upon this subject, both in London and at high altitudes, resulted in the appearance in 1897 of Dr. Marcet's "Contribution to the history of the respiration of man." The book consists essentially of the subject-matter of the Croonian Lectures which were delivered by Dr. Marcet before the Royal College of Physicians in 1895. As this book was fully reviewed in these columns at the time of its appearance, no further mention need be made of it here. Not only will physiology miss Dr. Marcet as a worker, but working physiologists will miss him as a personality; he was constantly to be seen at meetings of the Physiological Society, and kept up his interest in all the branches of that science which has extended so enormously the field of its knowledge since he joined the ranks of its workers.

F. W. TUNNICLIFFE.

SIR MICHAEL FOSTER AND HIS PUPILS.

WE have been asked to publish the following letter, addressed to Sir Michael Foster on the occasion of his entering Parliament. His biological friends at Cambridge have done well in expressing their loyalty towards Sir Michael, to whom the University owes so much. The signatures might doubtless have been indefinitely multiplied had the opportunity of adding their names been given to Sir Michael Foster's friends and pupils scattered over many lands. This, however, was not attempted, the letter not being circulated beyond the group of old pupils and friends, in Cambridge, with whom it originated.

TO SIR MICHAEL FOSTER, K.C.B., M.P.

DEAR SIR MICHAEL,—We, a few of your Cambridge friends, take the opportunity given by your entering Parliament to express our loyalty, respect, and cordial friendship towards you.

Though we regret anything which takes you from among us, yet we cannot but rejoice that the cause of learning has gained so strong an advocate in Parliament.

The work you have done in Cambridge during the last thirty years seems to us of unique value. You have taught us to recognise what is worth learning, and you have taught us how to learn. If we, in Cambridge, now value and seek after the

advancement of natural knowledge, we owe it to you more than to any man living.

We beg you to believe that we are grateful, and we shall rejoice if we can in any way prove our sincerity.

We can ill afford to lose either the weight of your name or your guidance at our councils; we can indeed hardly imagine a greater misfortune than the breaking of the bond between you and us. But we cannot complain if, after many years of service, you have found it necessary to loosen your official ties to the University. We regret that your enlarged liberty has not come to you in a form which would have marked our sense of what we owe to you. But we rejoice that an arrangement has been arrived at which will allow your interests still to centre in Cambridge, giving you, at the same time, the opportunity of working in a wider field, where you may do for England what you have already done for Cambridge, and where your services to learning may benefit, not only England, but the whole English-speaking race.

We are proud to sign ourselves

Your friends and pupils,

H. K. ANDERSON.	J. N. LANGLEY.
FRANCIS DARWIN.	A. SHERIDAN LEA.
A. G. DEW-SMITH.	J. J. LISTER.
WALTER GARDINER.	A. SEDGWICK.
W. H. GASKELL.	A. C. SEWARD.
ALFRED C. HADDON.	ARTHUR E. SHIPLEY.
W. B. HARDY.	L. E. SHORE.
S. F. HARMER.	H. MARSHALL WARD.
WALTER HEAPE.	

March 9, 1900.

NOTES.

THE preliminary programme of the meeting of the British Association to be opened at Bradford, on September 5, has now been drawn up. The new president is Sir William Turner, F.R.S., and the sectional presidents will be as follows:—Mathematical and Physical Science, Dr. J. Larmor, F.R.S.; Chemistry, Prof. W. H. Perkin, F.R.S.; Geology, Prof. W. G. Sollas, F.R.S.; Zoology (and Physiology), Dr. R. H. Traquair, F.R.S.; Geography, Sir George S. Robertson; Economic Science and Statistics, Major P. G. Craigie; Mechanical Science, Sir Alexander R. Binnie; Anthropology, Prof. John Rhys; Botany, Prof. Sydney H. Vines, F.R.S.; and Corresponding Societies, Prof. E. B. Poulton, F.R.S. There will be a separate department of astronomy in Section A, with Dr. A. A. Common, F.R.S., as chairman. The two evening discourses will be delivered by Prof. Gotch, F.R.S., on "Animal Electricity," and Prof. W. Stroud, on "Range Finders." The lecture to working men will be delivered by Prof. S. P. Thompson, F.R.S., but the subject has not yet been announced.

At the anniversary meeting of the Royal Irish Academy, on March 16, the following were elected honorary members of the Academy in the section of science:—Aleksandr O. Kovalevskij, St. Petersburg; J. A. Gaudry, Paris; P. G. Tait, Edinburgh; J. H. van t' Hoff, Berlin; J. J. Thomson, Cambridge.

ATTENTION has several times been drawn in these columns to the remarkable properties of Becquerel rays, and, in particular, of those rays emanating from radium. The theory that the radiations consist of material particles is supported by M. Becquerel's recent observations on the action of screens in cutting off the radiations deviated by a magnetic field. From the *Revue Générale des Sciences* for March 15, we learn that a decisive experiment has been performed on this point. It has been established beyond doubt that the emanations from radium communicate a negative charge to bodies on which they fall, while the radium itself becomes charged negatively, and it is inferred that the emanations from radium, or, at any rate, a portion of them, consist of material particles carrying negative charges.

It will be remembered that the work of the Ben Nevis Observatories would have been brought to an abrupt conclusion in 1898, had not Mr. J. Mackay Bernard come forward with a donation of 500*l.*, which secured its continuance for another year. In 1899, he gave another donation of 500*l.*, under which the directors are now carrying on their important work. The following extract from the report of the Council of the Scottish Meteorological Society, read at the annual general meeting on Monday, shows the present position of the Observatories:—"The position of matters was taken into serious consideration by the council at their meeting on Monday, March 12, when Mr. Mackay Bernard, with a generosity which it is difficult to describe, intimated his wish of making a third donation of 500*l.* to complete the observations in the way desired by the directors in their previous report, and so covering the whole of a sun-spot period of eleven years, and securing at the same time good averages of the meteorological elements for the highest position in the British Islands, and an adjoining Sea-level Observatory at Fort-William. The Ben Nevis work has thus been singularly fortunate in securing very large support from a gentleman, moved by patriotism as well as by a love of knowledge, and the completion of the experiment is secured. This statement does not imply that the council does not continue to be strongly of opinion that the Observatories should not be continued permanently as a national institution, and they are strengthened in this opinion by the character of the results already obtained. The council have now to intimate that another gentleman has offered further support of a very substantial character. In August last, he wrote offering help to the extent, if necessary, of 300*l.*, and the council are now in communication with him in regard to this most liberal offer."

WE learn from the *British Medical Journal* that Dr. W. Osler, F.R.S., professor of medicine in Johns Hopkins University, Baltimore, has sent in an application for the vacant chair of the practice of physic in the University of Edinburgh. Dr. Osler is a graduate of McGill University, Montreal. The other candidates are all graduates of the University of Edinburgh, and in order of seniority are as follows:—Dr. John Wyllie, Dr. Byrom Bramwell, Dr. Alexander James and Dr. G. A. Gibson. Dr. Osler is a Fellow of the Royal College of Physicians of London, while the other candidates are all Fellows of the Royal College of Physicians of Edinburgh.

THE second malaria expedition of the Liverpool School of Tropical Medicine, composed of Drs. Annett, Dutton and Elliott, started yesterday for Nigeria, where they will remain for some time studying malaria and health problems.

THE annual general meeting of the Chemical Society will be held on Thursday, March 29, at 3 p.m. At this meeting the Longstaff Medal will be presented to Prof. W. H. Perkin, Junr., F.R.S. In the evening the Bunsen Memorial Lecture will be delivered by Sir Henry E. Roscoe, F.R.S.

SCIENCE has to regret the loss of another of its eminent votaries. Dr. E. J. Lowe, F.R.S., who died on the 10th inst. at Shirenewton Hall, Chepstow, was best known by his indefatigable labours for the determination of the climate of Nottingham, at which place he was born, in November 1825. His meteorological observations began in 1840, and were continued there until 1882, when he removed from Highfield House to Shirenewton Hall. The results of this long series of observations were published in several valuable works, including "The Climate of Nottinghamshire." He also published many other treatises, e.g. "Barometrical Tables," as early as 1857, "Weather Prognostics," and the "Natural Phenomena of the Seasons."